

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) 1. A protein of the following (a) or (b) or a partial peptide thereof, or a salt thereof:

(a) a protein having the amino acid sequence shown by SEQ ID NO:2, the amino acid sequence shown by SEQ ID NO:25, or an amino acid sequence substantially the same as these;

(b) a protein having the amino acid sequence shown by SEQ ID NO:4, the amino acid sequence shown by SEQ ID NO:27, or an amino acid sequence substantially the same as these.

2. (Currently Amended) A protein of any of the following (a1) to (a4) and (b1) to (b4) or partial peptide thereof, or a salt thereof:

(a1) a protein having an amino acid sequence having one or two or more amino acids deleted, substituted or added in the amino acid sequence shown by SEQ ID NO:2, which binds to a plasticizer when forming a complex with the amino acid sequence shown by SEQ ID NO:4 or SEQ ID NO:27;

(a2) a protein having an amino acid sequence having one or two or more amino acids deleted, substituted or added in the amino acid sequence shown by SEQ ID NO:2, which binds to a plasticizer when forming a complex with a protein having an amino acid sequence having one or two or more amino acids deleted, substituted or added in the amino acid sequence shown by SEQ ID NO:4 or SEQ ID NO:27;

(a3) a protein having an amino acid sequence having one or two or more amino acids deleted, substituted or added in the amino acid sequence shown by SEQ ID NO:25, which binds to a plasticizer when forming a complex with the amino acid sequence shown by SEQ ID NO:4 or SEQ ID NO:27;

(a4) a protein having an amino acid sequence having one or two or more amino acids deleted, substituted or added in the amino acid sequence shown by SEQ ID NO:25, which binds to a plasticizer when forming a complex with a protein having an amino acid sequence having one or two or more amino acids deleted, substituted or added in the amino acid sequence shown by SEQ ID NO:4 or SEQ ID NO:27;

(b1) a protein having an amino acid sequence having one or two or more amino acids

deleted, substituted or added in the amino acid sequence shown by SEQ ID NO:4, which binds to a plasticizer when forming a complex with a protein having the amino acid sequence shown by SEQ ID NO:2 or SEQ ID NO:25;

(b2) a protein having an amino acid sequence having one or two or more amino acids deleted, substituted or added in the amino acid sequence shown by SEQ ID NO:4, which binds to a plasticizer when forming a complex with a protein having an amino acid sequence having one or two or more amino acids deleted, substituted or added in the amino acid sequence shown by SEQ ID NO:2 or SEQ ID NO:25:

(b3) a protein having an amino acid sequence having one or two or more amino acids deleted, substituted or added in the amino acid sequence shown by SEQ ID NO:27, which binds to a plasticizer when forming a complex with a protein having the amino acid sequence shown by SEQ ID NO:2 or SEQ ID NO:25:

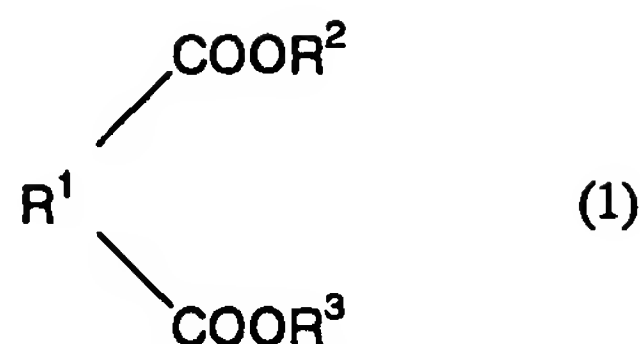
(b4) a protein having an amino acid sequence having one or two or more amino acids deleted, substituted or added in the amino acid sequence shown by SEQ ID NO:27, which binds to a plasticizer when forming a complex with a protein having an amino acid sequence having one or two or more amino acids deleted, substituted or added in the amino acid sequence shown by SEQ ID NO:2 or SEQ ID NO:25.

3. (Currently Amended) A protein of the following (a) or (b) or a partial peptide thereof, or a salt thereof:

(a) a protein having the amino acid sequence shown by SEQ ID NO:2 or an amino acid sequence substantially the same as these;

(b) a protein having the amino acid sequence shown by SEQ ID NO:4 or an amino acid sequence substantially the same as these.

4. (Currently Amended) The protein of claim 2 ~~or 3~~, wherein the plasticizer is a plasticizer represented by formula (1):



wherein R¹ represents o-phenylene, and R² and R³ are the same or different and each represents H, a linear or branched alkyl having 1 to 20 carbon atoms, a benzyl that may be substituted, or a cyclohexyl that may be substituted.

5. (Currently Amended) A method of genetically recombining ~~a the~~ protein of ~~any one of~~ claims claim 1 to 4 and 6.
6. (Currently Amended) ~~A protein obtained by the method of claim 5, or a salt thereof. A~~ method of genetically recombining the protein of claim 2.
7. (Currently Amended) ~~A partial peptide of a protein of any one of claims 1 to 4 and 6, or a salt thereof~~ method of genetically recombining the protein of claim 3.
8. (Currently Amended) A polynucleotide encoding ~~a the~~ protein of ~~any one of claims~~ claim 1 to 4 and 6.
9. (Currently Amended) A ~~recombinant vector harboring the~~ polynucleotide of ~~claim 8~~ encoding the protein of claim 2.
10. (Currently Amended) A ~~transformant transformed with the recombinant vector of claim 9~~ polynucleotide encoding the protein of claim 3.
11. (Cancelled)
12. (Original) A complex wherein the following (a) and (b) are linked:
 - (a) a protein having the amino acid sequence shown by SEQ ID NO:2, the amino acid sequence shown by SEQ ID NO:25, or an amino acid sequence substantially the same as these;
 - (b) a protein having the amino acid sequence shown by SEQ ID NO:4, the amino acid

sequence shown by SEQ ID NO:27, or an amino acid sequence substantially the same as these.

13. (Original) A method of identifying a plasticizer that binds to the complex of claim 12, which comprises using the complex.

14. (Original) A method of measuring or quantifying a plasticizer, which comprises using the complex of claim 12.

15. (Original) A kit for measuring or quantifying a plasticizer, which comprises the complex of claim 12.

16. (Original) A method of concentrating a plasticizer, which comprises using the complex of claim 12.

17. (Original) A kit for concentrating a plasticizer, which comprises the complex of claim 12.